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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,848	02/23/2004	Ren-Ju Tzeng	YEO 164	5505

7590 08/11/2005

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EXAMINER

KENNEDY, JOSHUA T

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/782,848	Applicant(s) TZENG, REN-JU	
	Examiner Joshua T. Kennedy	Art Unit 3679	<i>JK</i>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

JK

DETAILED ACTION

Claims 1-2 have been examined.

Claim Objections

Claims 1-2 are objected to because of the following informalities:

Change all references of "the said" to either "said" or "the". Appropriate correction is required.

In line 6 of Claim 1, change "insertion of the said" to "insertion --into-- said"

In line 7 of Claim 1 and line 5 of Claim 2, change "A plurality" to "--a-- plurality"

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Each claims both an apparatus and the method steps of using the apparatus in indefinite under 35 USC 112, second paragraph. This type of claim is indefinite because it fails to positively recite the boundaries sought for protection. The metes and bounds of the claim cannot be determined because it is unclear as to which category of subject matter is sought for protection, i.e., the method or the apparatus. The claims with be considered and prosecuted as best understood by the examiner.

Claim 2 recites the limitations "the said tubular support members", "the said plurality of bolts", "the foot end", "the said leg insert" in lines 1-4 of the claim and the limitation "the said collar" in line 8 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Gutner (US Patent 3,854,831).

Gutner discloses a tube conjunction structure composed of tubular support members (Figs 11 & 12), leg inserts (550, 555, 556), and a plurality of bolts (558); a plurality of through-holes (560) are formed near a foot end (Figs 10-12) of said tubular support members, and said leg insert is of one-piece construction (Fig 12; Col 5, Lines 47-48 "comprising a unitary body") and fabricated to be fitted into said tubular support member foot end (Fig 12; Col 5 lines 49-50 "adapted to be ensleeved within a tubular member"), the features of which are: a plurality of threaded holes (559; Col 2; lines 44-45 "I employ a bolt which is received within a tapped bore provided in a given arm") are tapped at a predetermined area of the said leg insert, a recess hole (559) of an appropriate depth is formed at the end edge of the said threaded holes to provide for the initial entry of the said bolts; a collar (558, 560; Col 5 Lines 36-41 "the head of the

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screw 558 is received within a countersunk portion 559 of the associated arm 555, and the screw is retracted after the element 545 has been ensleeved over the arm portion 555 so as to be received within the opening 560") is disposed at a suitable section of each said bolt such that when initially admitted into the leg insert threaded hole, said collar is first held in said recess hole, until said leg insert and said tubular support member foot end are inserted together, following which a hexagonal wrench is admitted into through-holes to rotate the said bolts in the opposite direction, allowing the said bolt collars to be tightened in place against the inner wall said tubular support member.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gutner in view of Mascioletti, et al (US Patent 6,503,020).

Gutner discloses a tube conjunction structure comprised of symmetrical tubular support members (Figs 1-6) along with a plurality of connecting components (Figs 1-6) and a plurality of bolts (30); a 45-degree angled side is disposed at the union ends of said tubular support members (does not disclose) and a plurality of through-holes (33,433, 560) are formed at a predetermined area near the union ends; each said connecting component is of one-piece construction (Figs 1-3; Col 5, Lines 47-48

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"comprising a unitary body") and fabricated to accommodate the insertion of said tubular support member union ends (Figs 1-3; Col 5 lines 49-50 "adapted to be ensleeved within a tubular member"), the features of which are: a plurality of threaded holes (31; Col 2; lines 44-45 "I employ a bolt which is received within a tapped bore provided in a given arm") are tapped at a predetermined area of the said connecting components and a recess hole (Figs 2-3) of an appropriate depth is formed at the end edge of each said threaded hole to provide for the initial entry of said bolts; a collar (30, 32; Col 2 Lines 52-56 "the bolt... is advantageous in that, as it is unthreaded from the bore and thus extends further into the opening 33, it serves to cinch or urge the tubular member against the shoulder") is disposed at a suitable section of each said bolt such that when initially admitted into said connecting component threaded hole, said collar is first held in the said recess hole until said connecting component and said tubular support member union end are inserted together, following which a hexagonal wrench is admitted into the said through-holes to rotate said bolts in the opposite direction, allowing said bolt collars to be tightened in place against the inner wall of said tubular support member.

Mascioletti teaches a connection system for securing structural members, such as posts and beams, together with all connection components hidden within the structural members and having symmetrical end cuts of the tubular structural members at 45 degrees (Figs 7-10) to create a 90 degree angle between the members. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the tubular members of the corner connector of Gutner with the 45 angle end cut of the

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tubular members as taught by Mascioletti because it is conventional to use a 45 degree end cut for tubular members of table frames as one way to form a 90 degree angle between members of the frame in order to have a level table top surface.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 5,378,077 to Paulsen cited to show a shaped connecting piece for connecting structural profile members having a 45 degree end cut of a frame member to form a 90 degree angle in the frame.

US Patent 3,858,989 to Field cited to show a similar connector having a set screw inserted into the interior connecting member that is secured to an outer tubular member once the set screw is unscrewed to the point that engages a recess of the outer member

US Patent 6,393,676 to Dowzall cited to show a shaped connecting piece for connecting structural profile members having a 45 degree end cut of a frame member to form a 90 degree angle in the frame also having a set screw inserted into the interior connecting member that is secured to an outer tubular member once the set screw is unscrewed to the point that engages a recess of the outer member.

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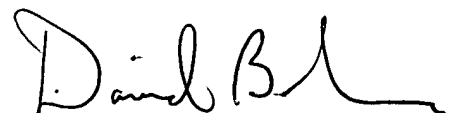
US Patent 5,018,921 to Pinney cited to show a set screw used to be inserted into the interior connecting member that is secured to an outer tubular member once the set screw is unscrewed to the point that engages a recess of the outer member.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua T. Kennedy whose telephone number is (571) 272-8297. The examiner can normally be reached on M-F: 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JTK
7/21/05


DAVID E. BOCHNA
PRIMARY EXAMINER

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